



Treasury Management Update

April 28, 2026

*Presented by Sarah Mayanja, Senior Managing
Consultant*

PFM Group Consulting
LLC

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Agenda

MANAGING CASH BALANCES

BANKING INDUSTRY UPDATE

BANKING TECHNOLOGY & SERVICES



Managing Cash Balances



How Do Banks Invoice Fees - Account Analysis Statements

ANALYSIS STATEMENT
Number FDIC 0162667

DEPOSIT SUMMARY ANALYSIS
BANK AND COST CENTER NUMBER 495 0056040
DATE PREPARED 09-07-12
MONTH ENDING 08-31-12
ANNUAL SETTLEMENT 12-31-12
SETTLEMENT & ACCOUNT TYPE DEBIT 500
OFFICER NUMBER 609B
PAGE 1 OF 42
CUSTOMER SERVICE: 1.888.400.9009

INVESTMENT SUMMARY

INVESTMENT LEADER BALANCE	\$ 4,546,325.42
INVESTMENT COLLECTED BAL	4,546,650.87
LESS RESERVE REQUIREMENT	.00
AVAILABLE INVESTMENT BALANCE	4,546,650.89

BALANCE SUMMARY

AVG POSITIVE LEADER BALANCE	\$ 84,763,779.74
AVG LEADER BALANCE	84,763,779.74
LESS AVG FLGAT	5,361,942.87
AVG COLLECTED BALANCE	81,402,437.07
AVG NEGATIVE COLL BALANCE	.00
AVG POSITIVE COLL BALANCE	81,402,437.07
LESS RESERVES	.00
AVAIL BAL FOR EARNINGS CREDIT	81,402,437.07
AVAILABLE BALANCE RESERVES	11,147,856.77
NET AVAILABLE BALANCE	49,254,580.30
RES RESERVES ON NET AVAIL BAL	.00
DEFICIT COLLECTED BALANCE	49,254,580.30

EARNINGS CREDIT SUMMARY

AVAIL BAL FOR EARNINGS CREDIT	\$ 81,402,437.07
EARNINGS ON AVAILABLE BALANCE	17,324.98
LESS TOTAL SERVICE CHARGES	25,023.39
DEFICIT	8,698.81
PERIOD TO DATE DEFICIT	46,876.29
CURRENT PERIOD SERVICE CHARGE	.00

STATEMENT
FDIC 0162667

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DATE	BALANCE	BALANCE
BE	REMOVED	REQUIRED
07.35	44,809,838.70	
07.00	2,470,387.04	
06.00	744,176.05	
5.00	23,940.39	
07.00	819,465.86	
4.00	23,940.39	
06.00	229,832.26	
05.00	2,763,940.84	
04.00	236,483.87	
03.00	1,176,841.17	
02.00	385,993.50	
1.00	20,976.70	
01.00	1,177,419.34	
01.00	260,119.58	
01.00	300,477.42	
01.00	430,139.04	
01.00	62,557.59	
01.00	629,838.71	
01.00	342,666.14	
07.00	1,106,779.01	
07.00	104.75	
07.00	9,338.18	
07.00	889,997.13	
07.00	149,838.71	
07.00	1,083.87	
07.00	1,093,006.17	
07.00	382,000.44	
07.00	646,114.19	
07.00	234,967.74	
08.00	417,748.39	
1.75	6,261.94	
1.75	47,076.77	
08.00	941,938.48	
07.00	300,995.49	
07.00	1,333,948.39	

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SERVICE CHARGE	BALANCE REQUIRED
.00	0.00
96.60	454,954.83
.40	1,083.88
5.61	27,543.22
100.00	470,947.74
75.00	353,235.61
24.40	114,914.13
78.12	347,920.00
104.75	502,750.04
31.00	144,000.00
176.00	804,191.55
22.79	107,333.88
14.10	75,828.81
28.00	84,774.19
84.15	406,444.52
82.16	380,967.09
31.86	150,001.12
10.00	47,076.78
48.00	234,004.51
2.00	9,415.25
2.00	9,419.34
60.00	242,000.44
100.00	470,947.74
75.00	353,235.61
140.94	786,249.48
30.00	143,250.32
49.74	234,259.34
42.48	206,461.19
10.00	47,076.78
80.00	273,114.29
44.00	352,413.35
48.00	234,004.52
72.00	433,470.32
200.00	941,938.48
472.14	2,120,706.81
862.48	2,743,476.76

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SERVICE CHARGE	BALANCE REQUIRED
101.80	478,032.24
128.00	546,141.09
1.00	9,419.34
77.22	343,461.29
991.24	2,789,259.34
123.80	481,466.17
681.51	3,047,400.00
.65	1,061.19
11.28	45,094.37
86.04	485,230.42
29.12	113,597.43
350.00	706,481.61
.00	0.00
246.28	1,249,963.12
23.00	108,122.60
30.00	141,290.32
29.00	134,880.45
180.00	867,741.74
156.00	734,709.40
14,005.00	7,045,274.75
447.50	1,107,890.44
.00	0.00
85.00	400,122.80
18.00	47,076.77
30.00	141,290.32
60.00	242,000.44
100.00	470,947.74
75.00	353,235.61
140.94	786,249.48
30.00	143,250.32
49.74	234,259.34
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72.00	433,470.32
200.00	941,938.48
472.14	2,120,706.81
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Account Analysis Statements



- "Invoice" for banking services
 - Different than your monthly statement showing transaction activity
- Information included
 - Service descriptions, per item fee, volume used
 - Balance and compensation details
- Often available electronically
 - PDF
 - XLS/CSV
 - EDI 822
 - Interactive online modules



Sample Analysis Statement – Closer Look

<u>Service Description</u>	<u>Unit Price</u>	<u>Volume</u>	<u>Service Charges</u>
RECOUPMENT MONTHLY IB	0.12750	1,500.13	191.27
RECOUPMENT MONTHLY	0.12750	28,371.73	3,617.40
BALANCE & COMPENSATION INFORMATION			3,808.67
CONT DISB CREDITS POSTED	0.35000	36.00	12.60
DESKTOP DEPOSIT-DEPOSIT CREDITED	0.35000	75.00	26.25
ACCOUNT MAINTENANCE W/ CHK RETURN	4.80000	5.00	24.00
ZERO BALANCE MASTER ACCOUNT MAINT	9.45000	1.00	9.45
ACCT MAINTENANCE	4.80000	4.00	19.20
ACCT MAINTENANCE CHEXSTOR-PLUS	4.80000	1.00	4.80
ZERO BALANCE MONTHLY BASE	6.75000	7.00	47.25
DEBITS POSTED	0.04000	765.00	30.60
GENERAL ACCOUNT SERVICES			174.15

For illustrative purposes only



Earnings Credit Rates / Compensating Balances



- ◆ Earnings Credit Rates (ECRs) are credits offered by a bank to offset service charges.
 - Credits available for paying bank fees
 - Unused credits expire eventually
- ◆ Historically, the rate paid was often pegged to the U.S. Treasury bill rate.
- ◆ Transition to bank-managed rates.
 - ***Rate may not move with market rates***



Sample Analysis Statement

EARNINGS CREDIT SUMMARY

AVAIL BAL FOR EARNINGS CREDIT	\$	25,000,000.00
EARNINGS ON AVAILABLE BALANCES		18,047.95
LESS TOTAL SERVICES CHARGES		20,130.49
		<hr/>
DEFICIT		2,082.54
		<hr/>
		<hr/>

$$\begin{aligned} &\rightarrow \frac{\$18,047.95}{\$25,000,000} \times \frac{365}{31} \times 100 \\ &= \mathbf{0.85\%} \end{aligned}$$

For illustrative purposes only



What To Consider in Your Compensating Balances

- 1. *Deposit-based fees***
- 2. *Reserve Requirement***
- 3. *Expiration date of credits***



What To Consider in Your Compensating Balances

1. *Deposit-based fees (f/k/a "FDIC" Fees)*

- Many banks will assess a fee based on the value of deposits
- Fees are not standard across banks
- Amount of fees can equal or exceed the earnings credit paid
- Banks may consider waiving this for "premium" relationships



FDIC Announcement

 Federal Deposit Insurance Corporation 550 17th Street NW, Washington, D.C. 20429-9990	Financial Institution Letter FIL-33-2012 July 9, 2012
Caution Regarding Passing Deposit Insurance Assessment Fees on to Customers	

"...the FDIC discourages institutions from specifically designating that a customer fee is for deposit insurance or from stating or implying that the FDIC is charging such a fee."



What Terms to Look for?

- ✓ Balance Based Charges
- ✓ Deposit Administration Fee
- ✓ Deposit Bank Assessment
- ✓ Deposit Coverage
- ✓ Recoupment Monthly

“

**Recoupment
Monthly**



Sample Analysis Statement

FDIC-like charges are typically included in line-item portion of monthly analysis statement

<u>Service Description</u>	<u>Unit Price</u>	<u>Volume</u>	<u>Service Charges</u>
RECOUPMENT MONTHLY IB	0.12750	1,500.13	191.27
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DEBITS POSTED	0.04000	765.00	30.60
GENERAL ACCOUNT SERVICES			174.15

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What To Consider in Your Compensating Balances

2. *Reserve Requirement*

- When in effect, the bank will reduce the balance you can earn a credit on by 10%
- Less common than Balance-Based Fee
- **Fed waived 10% reserve requirement in March 2020¹; however, not all banks followed suit**

¹ <https://www.federalreserve.gov/monetarypolicy/reservereq.htm>



Bank Charges Can Significantly Reduce the Benefit of the ECR

<i>No Reserve Requirement or FDIC</i>			<i>Reserve Requirement and FDIC Assessed</i>		
Earnings Credit on Compensating Balance			Earnings Credit on Compensating Balance		
Total Collected Balance		\$25,000,000	Total Collected Balance		\$25,000,000
Less Reserve Requirement	0%	\$0	Less Reserve Requirement	10%	\$2,500,000
Available Balance		\$25,000,000	Available Balance		\$22,500,000
Earnings Credit	0.25%	\$5,308	Earnings Credit	0.25%	\$4,777
	$\$25,000,000 * 0.25 * 31/365$			$\$22,500,000 * 0.25 * 31/365$	
Less FDIC Assessment	0%	\$0	Less FDIC Assessment	0.10%	\$2,123
	$\$0 / (\$25,000,000 * (31/365))$			$\$2,123 / (\$25,000,000 * (31/365))$	
Net Earnings Credit	0.25% on Collected Balance	\$5,308	Net Earnings Credit	0.125% on Collected Balance	\$2,654

For illustrative purposes only



What To Consider in Your Compensating Balances

3. *Earnings Credit Expiration Date*

- Many banks do not allow unused credits to be applied to future charges
- Some banks will allow credits to roll over quarterly, semi-annual, or annually
- Credits that expire unused are not paid out as interest
- Lost credits will erode the value of the ECR



Sample Analysis Statement

EARNINGS CREDIT SUMMARY

AVAIL BAL FOR EARNINGS CREDIT \$ 25,000,000.00

EARNINGS ON AVAILABLE BALANCES 18,047.95
LESS TOTAL SERVICES CHARGES 20,130.49

DEFICIT 2,082.54

PERIOD TO DATE EXCESS 59,477.53

EXCESS REMAINING 57,394.99

$$\frac{\$18,047.95}{\$25,000,000} \times \frac{365}{31}$$

= **0.85%**

For illustrative purposes only



Balance Compensation Evolves

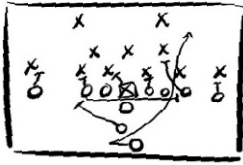


- Many banks offer alternatives that include hard dollar interest
- Each bank may offer a slightly different structure:
 - Interest on "excess" balances
 - Interest on balances above a "peg" amount
 - Interest on all DDA balances
- Like with compensating balances, rates are often bank-managed
 - ***Often subject to the same reserve requirement and deposit-based fees as traditional compensating balances***



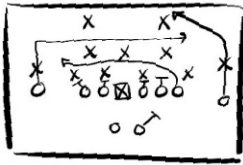
What can you do?

1 | *Analyze your banking relationships regularly; monthly is best*



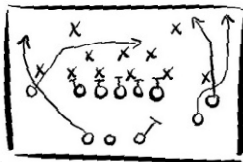
- Make sure to look at the rates offered and monthly charges
- Determine the "Net" Earnings Credit Rate your bank is paying
- Ensure that you are not earning more credits than you can use

2 | *Maintain frequent communication with your banker(s)*



- Monitor changes in rates and discuss your objectives regularly
- Ask your bank what their current rates are

3 | *Understand your options for short-term balances*



- Be nimble and prepared to capture increased earnings through alternative options both within and outside the bank



Polling Question #1

How frequently should you consider reviewing your account analysis statement?

- (a) Annually
- (b) Quarterly
- (c) Monthly
- (d) Not familiar with account analysis statement



Polling Question #1

How frequently should you consider reviewing your account analysis statement?

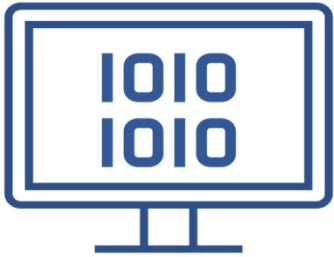
- (a) Annually
- (b) Quarterly
- (c) Monthly
- (d) Not familiar with account analysis statement



Banking Industry Update



Beyond Traditional Banks



- Treasury services have evolved
 - Credit card acceptance
 - Online payments
 - New forms of payment
 - Faster pay for employee wages
- Competition from fintechs is driving banks to decide:
 - *Compete? / Acquire? / Divest?*



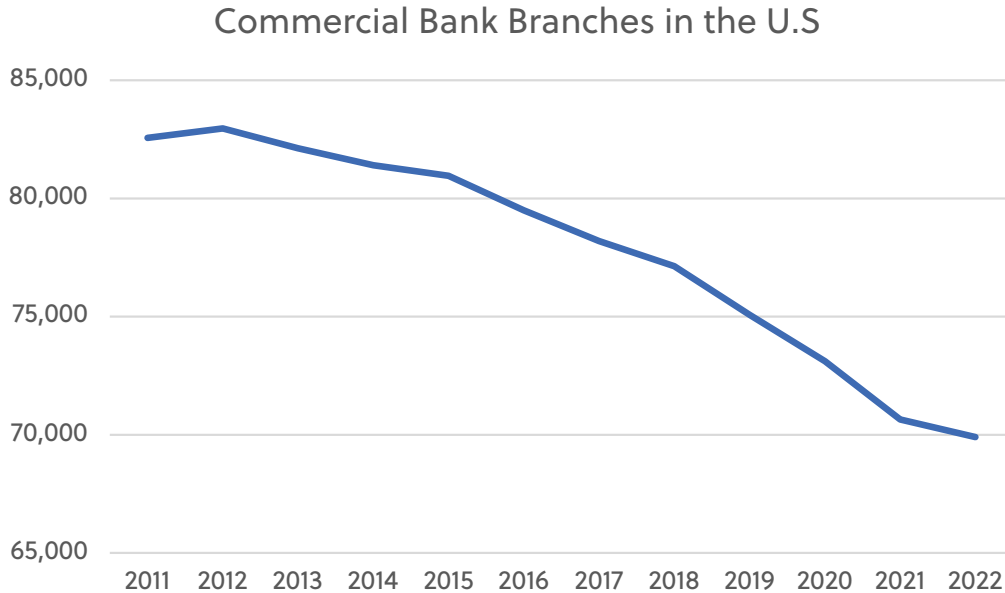
Bank Consolidations, Acquisitions & Divestitures



- Driven in part by pressure to compete with technology investment of larger banks & fintechs
 - *February 2021: M&T* + People's United
 - *September 2021: U.S. Bank* + MUFG Union Bank
 - *December 2021: BMO Harris* + Bank of the West
 - *December 2023: Citibank* announced divestiture from municipal bond underwriting business
- Many banks are also partnering with and/or acquiring some fintech solutions to expand offerings
 - **Bank of America** + *Paymode (fintech)*
 - **J.P. Morgan** + *Paymentus (fintech)*
 - **US Bank** + *Kubra (fintech)*



Changing Banking Landscape



- Banks are closing physical branches as more personal finance activity moves online.
 - Fewer branch tellers, longer wait times
 - Disincentivizing physical interactions
 - Investing in systems to support transactions
- In recent RFPs, we have seen **increased pricing** for:
 - Branch Deposits
 - Currency & Coin Deposits
 - Increase charges for non-bank customers to cash checks



Fraud Controls



- ◆ More online, virtual interactions creates fraud opportunities
- ◆ New / tighter controls may be needed
- ◆ Threat: "Business Email Compromise" (Impersonator Fraud)
 - Urgent item needing to be processed
 - Immediate transfer of funds (wire)
 - Generated from an e-mail account appearing to be legitimate
 - Knowledge of organization hierarchy
 - Ability to confirm with originator limited (out-of-office, vacation)



Fraud Controls

Send

To... John Staff Accountant

Cc...

Bcc...

Subject: Urgent Wire Needs to Be Sent

From: doej@abc_.com
Sent: Friday, March 13, 2015 6:04 PM
To: John Staff Accountant
Subject: Urgent Wire Needs to Be Sent

John,

Before leaving yesterday, I forgot to set up this wire for XYZ Electric. Please make sure you send it out first thing tomorrow morning. The wire instructions are listed below.

Thank-you. See you on Thursday, when I am back in the office.

Jane Doe Chief Financial Officer
ABC Corporation

For illustrative purposes only



What to do about fraud?



- ***External email notification banner/messages***
- ***Always question unsolicited emails***
- ***Beware of language that seems odd***
 - Uncommon phrases ("kindly")
- ***Independently verify request***
 - Do not reply to message or use contact info included
- ***Training***
 - Regular training will help keep you updated on new tactics



Polling Question #2

How frequently should your organization consider conducting training to educate employees on how to identify and prevent potential fraud attacks?

- (a) Annually
- (b) Quarterly
- (c) Monthly
- (d) Never



Polling Question #2

How frequently should your organization consider conducting training to educate employees on how to identify and prevent potential fraud attacks?

- (a) **Annually**
- (b) Quarterly
- (c) Monthly
- (d) Never



Banking Technology & Services



Account Validation Services



- Banks offer access to databases to validate account status ***and ownership*** in real-time
 - Database will return Y/N response
 - Validation can protect against fraudulent debits and payments
 - Useful for suspicious ad hoc requests and as part of standard A/P and payroll process
- **Can be useful to comply with NACHA rule on WEB Debit validation²**

² <https://www.nacha.org/rules/supplementing-fraud-detection-standards-web-debits>



Remote Check Scanning



- High-volume scanners commonly replace physical deposit of checks
 - Reduced reliance on transport
 - Faster collection
- **Many banks offer mobile deposit option**
 - May be cost-effective option for low-volume outlets



Remote Cash Safe



- On-site vault that accepts bills for deposit
 - Substitute multiple trips with reduced armored car pickups
 - Direct communication with your bank for same day credit
 - Counterfeit detection
- Cost is roughly equivalent to daily pickup cost
- Stringent requirements around vault placement



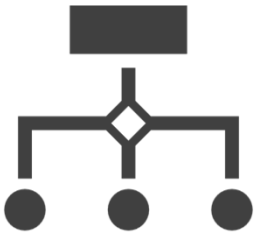
Mobile Banking



- ◆ New mobile features and applications have provided access to essential banking functions such as:
 - Balance reporting
 - Check deposit
 - Initiation of a repetitive wire
 - Secondary approval of wire transfers
 - Decisioning of Positive Pay items
 - Resetting of a user's password
 - "Soft" token for MFA



Virtual & Sub-Accounts



- ◆ Some banks offer enhanced capabilities for helping with reconciliation that include:
 - Subaccounts within a DDA that segregate transactions within reporting
 - Virtual accounts: unique payment instructions generated for different payers/purposes
 - » Allow for payment via ACH and Wire
- ◆ Can be useful for quickly identifying incoming EFT



Outsourced Check Printing



- Bank receives check issue file; then prints and mails checks on your behalf
- Includes positive pay and account reconciliation services
- Advantages
 - Lower cost for supplies
 - Postage savings on bulk mailing
 - Focus on core competencies
 - Disaster recovery



Polling Question #3

Approximately what percentage of your payments are done by check (# of payments)?

- (a) Less than 25%
- (b) Between 25% and 50%
- (c) Between 50% and 75%
- (d) More than 75%

This is for PFM records. No correct answer



Same Day ACH



- Same Day ACH transactions are available now
 - Settle in batches throughout the day
 - Funds available to their depositors by 3:00 PM (PT)
 - Your own deadlines determined by your bank
- Recent Change
 - **March 2022: Transaction limit raised to \$1,000,000**
- Beware Accidental Use
 - Educate staff on appropriate use cases
 - Understand opt-in and opt-out status



Instant Payments



- ◆ Real Time Payments/RTP (The Clearing House)
 - Immediate and irrevocable funds availability, 24/7
 - “Push” payments only; messaging functionality enables requests for payment & response
- ◆ FedNow (Federal Reserve)
 - Intended to expand instant payments beyond largest banks



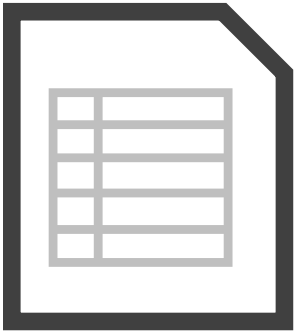
Tokenized Payments/Zelle



- **Business-to-person (B2P)** electronic payment using payee's email or cell phone number
- Consumers who register with Zelle network can receive electronic payments
- Benefits
 - **Reduce need to store bank account data**
 - Less expensive to issue vs. check
 - Faster payments to payee



Integrated Payables



- Single file to communicate all payment types to banking partner including:
 - Check
 - ACH
 - Wire
 - Virtual Card
 - Zelle
- May feature “smart routing” of transactions
- Options for who maintains beneficiary account data



Electronic Bill Payment & Presentment



- ◆ Service that banks use to electronically or digitally present your bill, i.e. tax bill, utility bill, insurance bill, to facilitate a faster and/or electronic payment of that bill
 - Improves collection and billing efficiency
 - Automates the Accounts Receivables process
 - Typically offers multiple choices for convenient ways to pay:
 - ACH, eCheck, Tokenized Payments (Zelle, Venmo, etc.)
 - Credit Card, IVR (phone), Kiosk.
- ◆ May feature secure email delivery, stored payment data and autopay
- ◆ Some EBPP solutions offer a convenience fee model as allowed by association rules and state, federal legislation



About the Speaker



Sarah Mayanja

Senior Managing Consultant

mayanjas@pfm.com

Sarah Mayanja is a Senior Managing Consultant at PFM. She brings a wealth of experience in consumer, community, investment and commercial banking. With a comprehensive background in the banking sector, Sarah has developed a keen understanding of the intricacies and nuances that drive successful treasury operations.

As a member of PFM's treasury consulting team, Sarah collaborates closely with clients during Banking RFP, Treasury Assessment, Banking Fee Analysis and Banking Transition engagements. Her responsibilities include facilitating, soliciting and reviewing proposed banking services to help assist clients with operational requirements. Sarah is dedicated to implementing an ideal set of services designed to streamline receivable, payable and liquidity needs.

Prior to PFM, Sarah honed her expertise in treasury services by working with both global and community banks. This experience has equipped her with a unique perspective when working on large-scale operations and community-focused initiatives.

Sarah graduated from The University of Texas at Dallas in 2019 with a Bachelor of Science in Finance.



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